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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DONADO, FRANK E

ART UNIT

PAPER NUMBER

2617

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,975	<b>Applicant(s)</b> BIENAS ET AL.	
	<b>Examiner</b> FRANK DONADO	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed on 1/30/09 has been entered. Claims 15 and 27 have been amended. No claims have been added. Claims 15-28 are currently pending in this application, with claims 15 and 27 being independent.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

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and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 15, 16, 19, 20, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergendorff (**WIPO Publication WO 02/078382**), in view of Kurihara (**US PG Publication 2005/0099942**).

Regarding claim 15, Bergendorff teaches a method of determining a local position of a first mobile radio communication device in a radio cell of a radio network of a radio communication system, comprising: transmitting position information by at least one radio signal from at least one second mobile communication device, the location of which is known either to the at least one second mobile communication device or to the radio network, and which is either in the radio cell or in another radio cell, the at least one radio signal being transmitted to the first mobile radio device via either a direct radio connection or an indirect radio connection via the radio network; **(A position of a 1<sup>st</sup> communication device is determined from position information communicated from a 2nd communication unit to said 1st communication unit, Pg. 3, lines 11-19 and 28-32, Pg. 4, lines 33-35 and Pg. 6, lines 29-32)**. Bergendorff does not teach inferring a distance between the first mobile radio communication device and the at least one second mobile communication device on the basis of the signal propagation time of the at least one radio signal. Kurihara teaches inferring a distance between the first mobile radio communication device and the at least one second mobile communication device on the basis of the signal propagation time of the at least one radio signal **(A distance between a first and second wireless unit is obtained from a signal propagation time between said first and**

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**second wireless unit, Paragraph 29).** It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Bergendorff to utilize signal propagation time to calculate the distance between the first mobile communication unit and the second mobile communication unit for the benefit of accuracy, transmission efficiency and cost savings.

Regarding claim 16, Bergendorff, in view of Kurihara, teaches a method according to claim 15. Bergendorff further teaches the method further comprises emitting an inquiry signal from the first mobile radio communication device via its radio interference requesting that each second mobile radio communication device send a radio information signal with position information thereof to the first mobile radio communication device **(Pg. 6, lines 27-32).**

Regarding claim 19, Bergendorff, in view of Kurihara, teaches a method according to claim 16. Bergendorff further teaches the inquiry signal is a broadcast radio signal **(The location signal transmitted is a GPS signal, which is a radio signal, Pg. 3, lines 33-35).**

Regarding claim 20, Bergendorff, in view of Kurihara, teaches a method according to claim 16. Bergendorff further teaches each second mobile radio communication device sends the one radio information signal within a predetermined response period for each respective second mobile radio communication device

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**(Precise locationing in the method for communications involves a condition for an observation time, Pg. 7, lines 4-11 ).**

Regarding claims 22 and 23, Bergendorff, in view of Kurihara, teaches a method according to claim 16. Bergendorff further teaches a time difference between a receipt of an inquiry signal and a sending a radio information signal by each respective second mobile radio communication device is included in each radio information signal as a position parameter of the position information, and a current position of each respective second mobile radio communication device and/or a sending time of the radio information signal from each respective second mobile radio communication device is included in each radio information signal as a position parameter of the position information. **(The observation times, which are the sending times, of both communication units are used as a condition to determine the quality level of the signals used for position determination, Pg. 7, lines 4-11).**

Regarding claim 24, Bergendorff, in view of Kurihara, teaches a method according to claim 16. Bergendorff further teaches the method further comprises calculating the position of the first mobile radio communication device via a Road Trip Time (RTT), an Observed Time Difference of Arrival (OTDOA), and/or a Global Positioning System (GPS) position device in the first mobile radio communication device using the position information included in each radio information signal **(Pg. 3, lines 33-38).**

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Regarding claim 25, Bergendorff, in view of Kurihara, teaches a method according to claim 24. Bergendorff further teaches in the calculating, position information received by the first mobile radio communication device is used. **(P1 is position information received by the first communication unit in Figure 1, Pg. 6, lines 10-12)**

Regarding claim 26, Bergendorff, in view of Kurihara, teaches a method according to claim 15. Bergendorff further teaches the method further comprises transmitting the position information received by the first mobile radio communication device to a position determining unit in the radio network which calculates a current local position of the first mobile radio communication device **(The positioning facility, base station or the second communication unit itself may determine the position of the first communication unit relative to GPS satellites after receiving other type of position information related to the first, from the first, Pg. 3, lines 33-38, Pg. 4, lines 1-5 and Pg. 6, lines 27-32).**

Regarding claim 27, Bergendorff teaches a radio communication device, comprising: an inquiry unit for requesting position information from at least one mobile radio communication device located in a radio cell of a radio network of a radio communication system or in a different radio cell, a position of the at least one mobile radio communication device being known to either the at least one mobile radio communication device or to the radio network; a receiving unit receiving at least one

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radio information signal respectively from the at least one mobile radio communication device and evaluating the received at least one radio information signal, each radio information signal including position information of the known position of the respective at least one mobile communication device sending the radio information signal, wherein the at least one radio information signal is transmitted via either a direct radio connection or an indirect radio connection via the radio network **(A position of a 1<sup>st</sup> communication device is determined from position information communicated from a 2nd communication unit to said 1st communication unit, Pg. 3, lines 11-19 and 28-32, Pg. 4, lines 33-35 and Pg. 6, lines 29-32)**; Bergendorff does not teach a distance between the first mobile radio communication device and the at least one second mobile communication device is inferred on the basis of the signal propagation time of the at least one radio signal. Kurihara teaches a distance between the first mobile radio communication device and the at least one second mobile communication device is inferred on the basis of the signal propagation time of the at least one radio signal **(A distance between a first and second wireless unit is obtained from a signal propagation time between said first and second wireless unit, Paragraph 29)**. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Bergendorff to utilize signal propagation time to calculate the distance between the first mobile communication unit and the second mobile communication unit for the benefit of accuracy, transmission efficiency and cost savings.



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Regarding claim 28, Bergendorff, in view of Kurihara, teaches the radio communication device of claim 27. Bergendorff further teaches a radio communication system comprising the radio communication device of claim 27 **(See claim 27)**.

6. Claims 17, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergendorff, in view of Kurihara, and further in view of Kang **(US Patent No. 6,836,653)**.

Regarding claim 17, Bergendorff, in view of Kurihara, teaches a method according to claim 16. Bergendorff, in view of Kurihara, does not teach before the emitting an inquiry signal, emitting a preceding inquiry signal from the first mobile radio communication device requesting that each second mobile radio communication device send an acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio device. Kang teaches before the emitting an inquiry signal, emitting a preceding inquiry signal from the first mobile radio communication device requesting that each second mobile radio communication device send an acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio device **(A method of applying a charge rate to a mobile station comprises a 1<sup>st</sup> mobile station requesting for a 2<sup>nd</sup> mobile station to confirm whether or not it is in a specific zone before the 2nd mobile location information is sent/determined, where the acknowledgement is made through transmission of subscriber information pertaining to the 2nd mobile station, Column 6, lines 7-10 and Column 10, lines 27-44)**. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Bergendorff to have the second

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mobile station send this type of response signal for the purpose of proper billing and time efficiency.

Regarding claim 18, Bergendorff, in view of Kurihara, and further in view of Kang, teaches the method according to claim 17. Kang further teaches transmitting, from the first mobile radio communication device, after receipt of an acknowledgement signal, a retrieval signal retrieving position information of the second mobile radio communication device that sent the received acknowledgement signal (**Column 10, lines 61-67**).

Regarding claim 21, Bergendorff, in view of Kurihara, and further in view of Kang, teaches a method according to claim 17. Bergendorff further teaches a predetermined minimum accuracy of a position of each second mobile radio communication device is a condition for each respective second mobile radio communication device to send the acknowledgement signal (**Pg. 7, lines 4-11**).

#### ***Response to Arguments***

7. Applicant's argument, filed 1/30/09, with respect to the objection of claim 28 has been fully considered and is persuasive. The objection of claim 28 has been withdrawn.

Applicant's arguments with respect to claims 15-28 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK DONADO whose telephone number is (571) 270-5361. The examiner can normally be reached Monday-Friday, 9:30 am-6 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571-272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-270-6361.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-273-8300.

/Frank Donado/

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/Rafael Pérez-Gutiérrez/

Supervisory Patent Examiner, Art Unit 2617